

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) [[A]] An aluminum nitride ceramic base material comprising main constituent elements and sintering agents ~~the sintering agents~~ comprising constituent elements, formed by governing the balance of the movement of the molten constituents of the sintering agents on the surface of the formed body, the aluminum nitride ceramic base material satisfying the following formula:

$$a/b \leq 1.3,$$

where a: the larger of c1 and c2,

b: the smaller of c1 and c2,

c1: the ratio "k" at a main-surface side,

c2: the ratio "k" at the other main-surface side,

$$k = s/m,$$

s: the fluorescent X-ray detected strength of the constituent elements of the sintering agents,

m: the fluorescent X-ray detected strength of the main-constituent elements.

2. (Cancelled)

3. (Cancelled)

4. (New) An aluminum nitride ceramic base material as defined in claim 1, wherein the formed bodies are charged into a sintering furnace with a setter made of a permeable material that is nonreactive with the constituents of the sintered bodies under sintering

conditions and free from softening and deformation in order to govern the balance of movement of the molten constituents of the sintering agents.

5. (New) An aluminum nitride ceramic base material as defined in claim 1, wherein the flow rate of the atmospheric gas in a sintering furnace is reduced at or above the melting point of the sintering agents in order to govern the balance of the movement of the molten constituents of the sintering agents.